

In the example shown in figure 1, MPLS labels will be used for the path 7 between elements 3x and 3b. The express route 7 differs from normal MPLS routing in that the MPLS pathway is set up for particular priority customers and not between specified nodes or elements within the network. At the start of each MPLS path, methods similar to those described previously are used to select the correct path which is to be used and assign the label to the packet which guides it along the path.

In the Claims

Amend claims 1, 7 and 8 and add new claim 9 as follows:

1. (Amended) A method of operating a connectionless network to provide a priority routing service for traffic between a predetermined network user and a plurality of customers communicating with said user via said network, the network comprising a plurality of network elements and links therebetween, the method comprising:

monitoring said network to determine an actual, or expected, congestion point;

maintaining an express route for carrying said traffic, the express route comprising one or more said links between two end elements which bypasses said congestion point;

identifying, at one or both said end elements, data packets originating from said user and destined for a said customer or data packets originating from a said customer and destined for said user, and diverting said packets along said express route.

7. (Amended) A network element for use in a connectionless network comprising a plurality of network elements and links therebetween and an express route for carrying traffic between a predetermined network user and a plurality of customers, the express route comprising one or more links between two end elements which bypasses a congestion point, the network element comprising:

means for routing data packets onto another element dependent on a destination address of said packets and

filter means for identifying and diverting data packets having a source address corresponding to said user, said identified packets being diverted to an element not specified by said routing means and forming part of said express route for said user.

AB
8. (Amended) A connectionless network comprising:

a plurality of network elements and links therebetween;

means for monitoring said network to determine an actual, or expected, congestion point;

means for maintaining an express route comprising one or more said links between two end elements which bypasses said congestion point;

wherein at least one said end element is arranged to identify data packets originating from a network user and destined for one of a plurality of customers of said user, or data packets originating from a said customer and destined for said user, and to divert said packets along said express route.